Application No. 10/553,108 Amendment dated September 24, 2008 After Final Office Action of June 27, 2008

## AMENDMENTS TO THE CLAIMS

The following listing of the claims replaces all prior versions of the claims presented in the application.

Claim 1 (Currently amended): A compound represented by formula (1):

## (wherein wherein,

R1 represents a hydrogen atom or a C1-6 alkyl group which may be substituted,

A represents an imidazolyl group or a pyrazolyl group represented by the following formulae:

## (wherein wherein,

R2 and R3 represent a hydrogen atom or a C1-6 alkyl group which may be substituted by G1,

R4 represents a hydrogen atom or a  $C_{1-6}$  alkyl group which may be substituted by G1, a  $C_{1-6}$  alkylcarbonyl group which may be substituted by G1, or a benzoyl group which may be substituted by G1,

n represents 0 or an integer of 1 to 3,

p represents 0 or an integer of 1 or 2, and

R2 and R3 may be identical to each other, or different from each other, when n and p are 2 or more[[)]],

B represents a group represented by the following formula:

# (wherein wherein,

R5 and R6 each independently represents a hydrogen atom, a cyano group, a hydroxyl group, a halogen atom, a C<sub>1-6</sub> alkyl group, a C<sub>1-6</sub> alkoxy group, a C<sub>2-6</sub> alkenyl group, a C<sub>2-6</sub> alkenyl group, a C<sub>2-6</sub> alkenyloxy group, a C<sub>2-6</sub> alkynloxy group, a C<sub>1-6</sub> acyloxy group, or a C<sub>3-6</sub> cycloalkyl group, or a phenyl group which may have a substituent,

k represents 0 or an integer of 1 to 15, and

R5 and R6 may be identical to each other, or different from each other, when k is 2 or more[[]], and

Z represents a chroman-2-yl group which is substituted by G2, a 2,3-dihydrobenzofuran-2-yl group which is substituted by G2, a thiochroman-2-yl group which is substituted by G2, a 2,3-dihydrobenzothiophene-2-yl group which is substituted by G2, or a 1,3-benzoxathiol-2-yl group which is substituted by G2.

G1 represents a cyano group, a formyl group, a hydroxyl group, an amino group, a dimethylamino group, or a halogen atom,

G2 is represented by the following formula: NHR (wherein R represents a hydrogen atom, a C<sub>1-6</sub> alkylcarbonyl group, or a benzoyl group which may have a substituent[[]], or a pharmaceutically acceptable salt thereof.

Amendment dated September 24, 2008 After Final Office Action of June 27, 2008

Claim 2 (original): A compound or pharmaceutically acceptable salt according to claim 1, wherein z is a group represented by the following formula (A), (B) or (C):

(wherein

\* represents an asymmetric carbon atom,

X1 represents an oxygen atom or a sulfur atom,

R7 to R17 each independently represents a hydrogen atom or a C1-6 alkyl group, and

G2 is represented by the following formula: NHR

(wherein R represents a hydrogen atom, a C<sub>1-6</sub> alkylcarbonyl group, or a benzoyl group which may have a substituent)).

Claim 3 (previously presented): A compound or pharmaceutically acceptable salt according to claim 1, wherein A is 1-imidazolyl or 1-H-pyrazole-5-yl which is substituted at the fourth position on the benzene ring.

Claim 4 (withdrawn): A production process of a compound represented by formula (1):

$$\begin{array}{c}
A \\
N - CO - B - Z \\
R 1
\end{array} (1)$$

(wherein,

R1 represents a hydrogen atom or a C1-6 alkyl group which may be substituted,

A represents an imidazolyl group or a pyrazolyl group represented by the following formulae:

(wherein

R2 and R3 represent a hydrogen atom or a  $C_{1\text{-}6}$  alkyl group which may be substituted by G1,

R4 represents a hydrogen atom or a  $C_{1.6}$  alkyl group which may be substituted by G1, a  $C_{1.6}$  alkylcarbonyl group which may be substituted by G1, or a benzoyl group which may be substituted by G1,

n represents 0 or an integer of 1 to 3,

p represents 0 or an integer of 1 or 2, and

R2 and R3 may be identical to each other, or different from each other, when n and p are 2 or more),

B represents a group represented by the following formula:

(wherein

R5 and R6 each independently represents a hydrogen atom, a cyano group, a hydroxyl group, a halogen atom, a C<sub>1-6</sub> alkyl group, a C<sub>1-6</sub> alkoxy group, a C<sub>2-6</sub> alkenyl group, a C<sub>2-6</sub> alkenyl group, a C<sub>2-6</sub> alkenyloxy group, a C<sub>2-6</sub> alkenyloxy group, a C<sub>1-6</sub> acyloxy group, or a C<sub>3-6</sub> cycloalkyl group, or a phenyl group which may have a substituent,

k represents 0 or an integer of 1 to 15, and

R5 and R6 may be identical to each other, or different from each other, when k is 2 or more),

Z represents a chroman-2-yl group which is substituted by G2, a 2,3-dihydrobenzofuran-2-yl group which is substituted by G2, a thiochroman-2-yl group which is substituted by G2, a 2,3-dihydrobenzothiophene-2-yl group which is substituted by G2, or a 1,3-benzoxathiol-2-yl group which is substituted by G2,

G1 represents a cyano group, a formyl group, a hydroxyl group, an amino group, a dimethylamino group. or a halogen atom, and

Application No. 10/553,108

Amendment dated September 24, 2008

Docket No.: 20241/0203481-US0

After Final Office Action of June 27, 2008

G2 is represented by the following formula: NHR (wherein R represents a hydrogen atom, a  $C_{1-6}$  alkylcarbonyl group, or a benzoyl group which may have a substituent),

#### comprising:

a step 1 in which a compound represented by the following formula (1')

(wherein

R1 represents a hydrogen atom or a C1-6 alkyl group which may be substituted,

A represents an imidazolyl group or a pyrazolyl group represented by the following formulae:

(wherein

R2 and R3 represent a hydrogen atom or a C1-6 alkyl group which may be substituted by G1,

R4 represents a hydrogen atom or a  $C_{1.6}$  alkyl group which may be substituted by G1, a  $C_{1.6}$  alkylcarbonyl group which may be substituted by G1, or a benzoyl group which may be substituted by G1,

n represents 0 or an integer of 1 to 3,

p represents 0 or an integer of 1 or 2, and

R2 and R3 may be identical to each other, or different from each other, when n and p are 2 or more)).

B represents a group represented by the following formula:

(wherein

R5 and R6 each independently represents a hydrogen atom, a cyano group, a hydroxyl group, a halogen atom, a C<sub>1-6</sub> alkyl group, a C<sub>1-6</sub> alkoxy group, a C<sub>2-6</sub> alkenyl group, a C<sub>2-6</sub> alkenyl group, a C<sub>2-6</sub> alkenyloxy group, a C<sub>2-6</sub> alkynloxy group, a C<sub>1-6</sub> acyloxy group, or a C<sub>3-6</sub> cycloalkyl group, or a phenyl group which may have a substituent.

k represents 0 or an integer of 1 to 15, and

R5 and R6 may be identical to each other, or different from each other, when k is 2 or more), and

Z' is represented by the following formula (A)', (B)', or (C)':

(wherein

\* represents an asymmetric carbon atom,

X1 represents an oxygen atom or a sulfur atom,

R7 to R17 each independently represents a hydrogen atom or a C1-6 alkyl group, and

G2 is represented by the following formula: NHR

(wherein R represents a hydrogen atom, a  $C_{1-6}$  alkylcarbonyl group, or a benzoyl group which may have a substituent))

is produced by reacting an amine compound represented by formula (2):

$$\stackrel{\text{A}}{\swarrow} \stackrel{\text{H}}{\underset{\text{R1}}{\bigvee}}$$
 (2)

(wherein

R1 represents a hydrogen atom or a  $C_{1\text{-}6}$  alkyl group which may be substituted, and

A represents an imidazolyl group or a pyrazolyl group represented by the following formulae:

Application No. 10/553.108 Amendment dated September 24, 2008 After Final Office Action of June 27, 2008

Docket No.: 20241/0203481-US0



(wherein

R2 and R3 represent a hydrogen atom or a C<sub>1-6</sub> alkyl group which may be substituted by G1,

R4 represents a hydrogen atom or a C<sub>1-6</sub> alkyl group which may be substituted by G1, a C<sub>1-6</sub> alkylcarbonyl group which may be substituted by G1, or a benzoyl group which may be substituted by G1,

n represents 0 or an integer of 1 to 3,

p represents 0 or an integer of 1 or 2, and

R2 and R3 may be identical to each other, or different from each other, when n and p are 2 or more))

with a compound represented by the following formula (3):

(wherein

Y represents a hydroxyl group or a halogen atom,

B represents a group represented by the following formula:

Amendment dated September 24, 2008 After Final Office Action of June 27, 2008

# (wherein

R5 and R6 each independently represents a hydrogen atom, a cyano group, a hydroxyl group, a halogen atom, a  $C_{1-6}$  alkyl group, a  $C_{1-6}$  alkoxy group, a  $C_{2-6}$  alkenyl group, a  $C_{2-6}$  alkenyloxy group, a  $C_{2-6}$  alkenyloxy group, a  $C_{2-6}$  alkynloxy group, a  $C_{1-6}$  acyloxy group, or a  $C_{3-6}$  cycloalkyl group, or a phenyl group which may have a substituent,

k represents 0 or an integer of 1 to 15, and

R5 and R6 may be identical to each other, or different from each other, when k is 2 or more) and

Z' is represented by the following formula (A)', (B)', or (C)':

# (wherein

\* represents an asymmetric carbon atom,

X1 represents an oxygen atom or a sulfur atom,

R7 to R17 each independently represents a hydrogen atom or a  $C_{\text{1-6}}$  alkyl group, and

G2 is represented by the following formula: NHR

(wherein R represents a hydrogen atom, a  $C_{1-6}$  alkylcarbonyl group, or a benzoyl group which may have a substituent)); and

a step 2 in which the nitro compound produced in the step 1 is converted to an amino group using a reducing agent.

Claim 5 (original): An antioxidant comprising as its active ingredient at least one compound represented by formula (1):

$$\begin{array}{c}
A \\
N - CO - B - Z
\end{array}$$
(1)

(wherein

R1 represents a hydrogen atom or a C1-6 alkyl group which may be substituted,

A represents an imidazolyl group or a pyrazolyl group represented by the following formulae:

(wherein

Docket No.: 20241/0203481-US0

R2 and R3 represent a hydrogen atom or a C<sub>1-6</sub> alkyl group which may be substituted by G1,

R4 represents a hydrogen atom or a  $C_{1-6}$  alkyl group which may be substituted by G1, a  $C_{1-6}$  alkylcarbonyl group which may be substituted by G1, or a benzoyl group which may be substituted by G1,

n represents 0 or an integer of 1 to 3,

p represents 0 or an integer of 1 or 2, and

R2 and R3 may be identical to each other, or different from each other, when n and p are 2 or more)),

B represents a group represented by the following formula:
(wherein

R5 and R6 each independently represents a hydrogen atom, a cyano group, a hydroxyl group, a halogen atom, a  $C_{1-6}$  alkyl group, a  $C_{1-6}$  alkoxy group, a  $C_{2-6}$  alkenyl group, a  $C_{2-6}$  alkenyl group, a  $C_{2-6}$  alkenyloxy group, a  $C_{2-6}$  alkynloxy group, a  $C_{1-6}$  acyloxy group, or a  $C_{3-6}$  cycloalkyl group, or a phenyl group which may have a substituent,

k represents 0 or an integer of 1 to 15, and

R5 and R6 may be identical to each other, or different from each other, when k is 2 or more),

Z represents a chroman-2-yl group which is substituted by G2, a 2,3-dihydrobenzofuran-2-yl group which is substituted by G2, a 1,3-dihydrobenzofuran-2-yl group which is substituted by G2, a 2,3-dihydrobenzofuran-2-yl gr

Application No. 10/553,108 Amendment dated September 24, 2008

After Final Office Action of June 27, 2008

Docket No.: 20241/0203481-US0

dihydrobenzothiophene-2-yl group which is substituted by G2, or a 1,3-benzoxathiol-2-yl group which is substituted by G2,

G1 represents a cyano group, a formyl group, a hydroxyl group, an amino group, a dimethylamino group, or a halogen atom, and

G2 is represented by the following formula: NHR (wherein R represents a hydrogen atom, a C<sub>1-6</sub> alkylcarbonyl group, or a benzoyl group which may have a substituent) or a pharmaceutically acceptable salt thereof.

Claim 6 (original): An antioxidant according to claim 5, wherein in formula (1) z is represented by the following formula (A), (B), or (C):

\* represents an asymmetric carbon atom,

X1 represents an oxygen atom or a sulfur atom,

R7 to R17 each independently represents a hydrogen atom or a  $C_{\text{1-6}}$  alkyl group, and

G2 is represented by the following formula: NHR

Application No. 10/553,108 Docket No.: 20241/0203481-US0 Amendment dated September 24, 2008

After Final Office Action of June 27, 2008

(wherein R represents a hydrogen atom, a  $C_{1\text{-}6}$  alkylcarbonyl group, or a benzoyl group which may

have a substituent)).

Claim 7 (withdrawn): A kidney disease, cerebrovascular or cardiovascular disease treatment

agent characterized by comprising the antioxidant according to claim 6.

Claim 8 (withdrawn): A cerebral infarction treatment agent characterized by comprising the

antioxidant according to claim 6.

Claim 9 (withdrawn): A retinal oxidation disorder inhibitor characterized by comprising the

antioxidant according to claim 6.

Claim 10 (withdrawn): A retinal oxidation disorder inhibitor according to claim 9 for age-

related macular degeneration or diabetic retinopathy.

Claim 11 (withdrawn): A lipoxygenase inhibitor characterized by comprising the antioxidant

according to claim 6.

Claim 12 (withdrawn): A 20-hydroxyeicosatetraenoic acid (20-HETE) synthase inhibitor

characterized by comprising the antioxidant according to claim 6.

15

3317195.1 0203481-US0

Amendment dated September 24, 2008 After Final Office Action of June 27, 2008

Claim 13 (previously presented): A compound or pharmaceutically acceptable salt

according to claim 2, wherein A is 1-imidazolyl or 1-H-pyrazole-5-yl which is substituted at the

fourth position on the benzene ring.

Claim 14 (previously presented): A compound or pharmaceutically acceptable salt

according to claim 1, wherein R1 is a hydrogen atom, A is 4-(1H-pyrazole-5-yl), k is 0, and Z is

represented by the following formula: